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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,407	01/11/2002	Dennis M. Hilton	621P001	8920
7590 08/24/2005		,	EXAMINER	
Kevin S. Lema	ack		TOOMER,	CEPHIA D
Nields & Lema	ck			
176 E. Main Street			ART UNIT	PAPER NUMBER
Westboro, MA 01581			1714	
			DATE MAILED: 08/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

·	)	W.				
	Application No.	Applicant(s)				
	10/044,407	HILTON ET AL.				
Office Action Summary	Examiner	Art Unit				
•	Cephia D. Toomer	1714				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)☐ Responsive to communication(s) filed on 18 M 2a)☑ This action is FINAL. 2b)☐ This 3)☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ⊠ Claim(s) 1,5-8,10 and 11 is/are pending in the 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,5-8,10 and 11 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicativity documents have been received in PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

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## **DETAILED ACTION**

This Office action is in response to the amendment filed May 18, 2005 in which claim 1 was amended. It should be noted that claims 10-11 were inadvertently omitted from the rejection of the claims under 35 USC 103(a). However, as can be seen throughout the prosecution of this application these claims have stood rejected. The examiner is reinserting the claims in the present Office action.

The Double Patenting rejections are withdrawn in view of Applicant filing Terminal Disclaimers.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chao (US 5,109,030) in view of SU 1743887 for the reasons of record.
- 3. Claims 7, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chao (US 5,109,030) in view of SU 1743887 further in view of Nebesnak (US 6,475,275) for the reasons of record.
- 4. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues that the claims are now commensurate in scope with the showings of record. Applicant argues that the results of record demonstrate to the skilled artisan that it is the method of the present invention and not the amounts of

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components that results in the surprising and unexpected results. Applicant argues that the pre-foaming step in Chao would render the process commercially useless, regardless of the particular identity or amounts of binder and stabilizer.

The examiner has reviewed the results of record and maintains that the combination of Chao, SU '887 and Nebesnak teach the present invention. Applicant has shown that the <u>preferred</u> method of Chao produces less than desirable results. However, Chao teaches that the foamed composition may also be prepared by mechanically foaming a mixture containing a prefoam component (a mixture of water and the foam stabilizer) with a hydraulic slurry (see col. 7, lines 11-14). Chao does not have to produce a prefoam and therefore, the method of Chao would not render the process commercially useless.

Applicant argues that Claim 1 expressly requires that the formed slurry be conveyed to a length of hose and that a sufficient amount of gas be introduced into the slurry in the length of hose at a flow rate and pressure sufficient to cause the slurry to foam. Applicant argues that no vortex-forming elements are required to form the foam.

Chao teaches that the foam may be prepared by any method known in the art including using compressed air and water. SU teaches using compressed air to feed the foaming solution into the sleeve of the mixing chamber. The present claims do not exclude a vortex-mixing chamber and SU clearly sets forth that the amount of gas introduced into the slurry is sufficient to cause the slurry to foam.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cephia D. Toomer Primary Examiner Art Unit 1714

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